

K. J. SOMAIYA INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH,
Vidyavihar, Mumbai- 400077

Program: PGDM-Comm (Batch2019-21), Trim-I
Subject: Management Accounting

Maximum Marks: 50

Duration: 3 hours

Date: 27th September, 2019

Instructions

Q1 is compulsory, carrying 20 marks. Attempt any 3 questions from the remaining, each carrying 10 marks.

Q1. The following are the balances of 3T Ltd. as on 31.3.2020.

	₹		₹
Loan interest paid	15,000	Share capital	10,00,000
Purchases	5,00,000	General reserve	60,000
Opening stock	80,000	Loan	3,20,000
Debtors	2,00,000	Purchase return	20,000
Prepaid Insurance	30,000	Sales	12,00,000
Investment	1,50,000	Creditors	30,000
Land & building	14,00,000	Profit & Loss A/c	42,000
Plant & Machinery	2,30,000	Outstanding expenses	10,000
Sales return	25,000	Short term loans	18,000
Salary and office expenses	70,000		
Total	27,00,000	Total	27,00,000

Additional information:

- i. Closing stock is valued at ₹40,000.
- ii. Provide tax @ 30%
- iii. Depreciation is @ 10% on Plant & Machinery
- iv. Provide for bad debts @10% of debtors.

Prepare the financial statements.

Q2. a. Prepare an area wise and product wise sales budget from the following data: (5)

Product	January	February
X	1,500 units	1,800 units
Y	2,400 units	3,000 units

The sales area A and B account for 75% and 25% sales of Product X and 20% and 80% of Product Y.

The selling price per unit of Product X is ₹ 8 and the selling price per unit of Product Y is ₹ 14.

b. UV Ltd. presents the following information for November, 2018: (5)

Budgeted production of Product Q is 200 units

Standard consumption of raw materials 2 kgs per unit of Q

Standard price of raw material is Rs 6 per kg.

Actually, 250 units of Q were produced and material was purchased at Rs 8 per kg and consumed at 1.8 kgs per unit of Q. Calculate Material Cost Variance, Material Price Variance and Material Usage Variance.

Q3. From the following forecasts of income and expenditure, prepare a Cash Budget for the three months ending on June, 2019:

Month	Sales	Purchase	Wages	Misc.
February	1,20,000	84,000	10,000	7,000
March	1,30,000	1,00,000	12,000	8,000
April	80,000	1,04,000	8,000	6,000
May	1,16,000	1,06,000	10,000	12,000
June	88,000	80,000	8,000	6,000

Additional information:

- i. Sales: 40% realized in the month of sales, discount allowed 5%, balance realized in the following month
- ii. Purchases: These are paid 2 months following supply.
- iii. Wages: paid in arrears in the same month
- iv. Misc. expenses: Paid a month in arrears
- v. Income from Investment: Rs 15,000 received quarterly in April, July, etc
- vi. Cash in hand is Rs 5,000 on April 1,2019

Q4. Amy Winston, the manager of food services for one of Boeing's plants, is trying to decide whether to rent a line of snack vending machines. Although individual snack items have various acquisition costs and selling prices, Winston has decided that an average selling price of \$1.50 per unit and an average acquisition cost of \$1.20 per unit will suffice for purposes of this analysis.

She predicts the following revenue and expense relationships:

	Per unit	Percentage of sales
Selling price	\$ 1.50	100
Variable cost	1.20	80

Contribution margin	0.3	20%
Monthly fixed expenses:		
Rent	\$3,000	
Wages for serving	13,500	
Other fixed expenses	1,500	
Total fixed expenses per month	\$18,000	

You are required to compute the following:

- (i) Break Even Point in units and \$value
- (ii) Number of units to be sold to earn a net profit of \$1,440
- (iii) What will be the net income if 65,000 units are sold?
- (iv) If the monthly rent is doubled, what will be the revised BEP in \$value?

Q5. Levoy, Corp., estimates it will produce 25,000 units of an electronic sensor part that goes into one of its final products, called a Fluctotron. It currently produces this sensor internally but is considering outsourcing this activity. Current internal capacity permits the production of a maximum of 40,000 sensors. The production manager has prepared the following information concerning the internal manufacture of 40,000 sensors:

	Per sensor
Direct materials	\$15
Labor	8
Variable overhead	10
Fixed Overhead	11
Total cost	\$44

The fixed overhead of \$11 per unit includes a \$2 per unit allocation for salary paid to a supervisor to oversee production of sensors. The fixed costs would not be reduced by outsourcing, except the supervisor would be fired (the company would terminate his contract). Assume that if Levoy outsources, its purchase price from the outsourcer is \$38 per unit.

1. Should Levoy outsource? Why or why not?
2. Assume that if Levoy outsourced, it would create sufficient excess capacity such that it would retain the supervisor and have him oversee production of a new optical reading product, called a Scanmeister. If each Scanmeister generates a contribution margin of \$15 and the company produces 10,000 Scanmeisters, what should Levoy do?